



**Australian Government**

# **RGRHBR501 Plan and implement an enterprise horse breeding strategy**

**Release: 1**

# RGRHBR501 Plan and implement an enterprise horse breeding strategy

## Modification History

| Release   | Comments                                                                         |
|-----------|----------------------------------------------------------------------------------|
| Release 1 | This version released with RGR Racing and Breeding Training Package Version 3.0. |

## Application

This unit of competency describes the skills and knowledge required to plan, develop and implement a horse breeding strategy for an enterprise or stud farm.

This unit is applicable to individuals who have specialised skills, technical and theoretical knowledge of the horse breeding sector, and management responsibilities for the breeding strategy for a horse stud.

No licensing or certification requirements apply to this unit at the time of publication.

Work health and safety and animal welfare legislation relevant to interacting with horses applies to workers in this industry. Requirements vary between industry sectors and state/territory jurisdictions. Users are advised to check with the relevant authority for specific requirements.

## Pre-requisite Unit

Nil

## Unit Sector

Horse Breeding (HBR)

## Elements and Performance Criteria

| Elements                                         | Performance Criteria                                                                                                                                                                                    |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i> | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                  |
| 1. Plan horse breeding strategy                  | 1.1 Determine breeding objectives based on business or operational model of the enterprise in consultation with relevant personnel<br>1.2 Identify and arrange resources to support breeding objectives |

| Elements                                               | Performance Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i>       | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                        | 1.3 Select breeding methods to optimise results and consistency<br>1.4 Assess financial costs and economic returns for breeding strategy<br>1.5 Formulate breeding strategy to meet enterprise objectives and performance indicators to evaluate outcomes                                                                                                                                                                                                                                             |
| 2. Apply genetic principles to horse breeding strategy | 2.1 Determine required traits suited to horse purpose that can be selected using genetic qualitative and quantitative principles<br>2.2 Apply genetic principles and analyse horse population data to predict results of possible matings to achieve desired traits<br>2.3 Develop strategies for maximising gene frequencies for required traits<br>2.4 Predict outcomes of possible matings to achieve required traits<br>2.5 Develop a strategy to achieve genetic progress within enterprise herd |
| 3. Select horses for breeding                          | 3.1 Determine criteria for selecting horses to breed based on heritability and purpose of horse<br>3.2 Analyse individual horse records for heritability, pedigree and progeny information to select breeding stock<br>3.3 Check and monitor selected horses to ensure condition and welfare status meet breeding program requirements<br>3.4 Select horses for breeding based on genetic characteristics, considering enterprise and/or client objectives                                            |
| 4. Monitor breeding program                            | 4.1 Supervise implementation of the breeding program for efficiency and effectiveness<br>4.2 Prioritise and implement changes necessary to achieve breeding objectives<br>4.3 Examine and control allocated resources within enterprise budgetary constraints                                                                                                                                                                                                                                         |
| 5. Evaluate horse breeding strategy                    | 5.1 Collate and analyse breeding data and records to evaluate program<br>5.2 Assess breeding selection criteria, data and outcomes against enterprise objectives and breeding strategy<br>5.3 Review performance of facilities, resources and equipment for effectiveness and efficiency<br>5.4 Document relevant information for continuous improvement and                                                                                                                                          |

| Elements                                         | Performance Criteria                                                                                   |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i> | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i> |
|                                                  | to inform future breeding practice                                                                     |

## Foundation Skills

*This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.*

| Skill                      | Description                                                                                                                                                                                                                                                                                               |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Numeracy                   | <ul style="list-style-type: none"> <li>Interpret, calculate and consolidate complex workplace measures relating to genetics, breeding and finances</li> </ul>                                                                                                                                             |
| Navigate the world of work | <ul style="list-style-type: none"> <li>Work independently and/or with others in making decisions to achieve enterprise breeding outcomes</li> <li>Understand requirements of role and take responsibility for work and breeding strategy outcomes</li> </ul>                                              |
| Interact with others       | <ul style="list-style-type: none"> <li>Use industry contacts and networks to build expertise about horse selection and breeding</li> </ul>                                                                                                                                                                |
| Get the work done          | <ul style="list-style-type: none"> <li>Use key features of workplace technology to access, prepare and report information</li> <li>Make decisions based on analysis of various breeding data and records</li> <li>Plan, sequence, prioritise and make adjustments to accommodate contingencies</li> </ul> |

## Unit Mapping Information

| Code and title current version                                        | Code and title previous version | Comments | Equivalence status |
|-----------------------------------------------------------------------|---------------------------------|----------|--------------------|
| RGRHBR501<br>Plan and implement an enterprise horse breeding strategy | Not applicable                  | New unit | No equivalent unit |

## Links

Companion Volumes, including Implementation Guides, are available at VETNet: -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5c4b8489-f7e1-463b-81c8-6ecce6c192a0>

# Assessment Requirements for RGRHBR501 Plan and implement an enterprise horse breeding strategy

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## Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has:

- developed and implemented a horse breeding strategy for an enterprise for at least one breeding season, which outlines:
  - enterprise breeding objectives and longer term goals
  - breeding strategy, including genetically sound selection of horses
  - resources and costs
  - criteria to measure success against breeding strategy.

## Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- basic genetic theories and principles, including:
  - qualitative and quantitative gene action
  - heritability of genetic traits
  - dominant and recessive genes
  - relevance of generation interval and genetic correlation
  - use of estimated breeding values and indexes in multi-trait selection
  - measurement of genetic characteristics used in breeding programs
  - application to the development of an organisation breeding program and long-term planning
- business models for horse breeding enterprises, including:
  - building own herd/stock
  - servicing customers' horses (walk-ins)
  - mixture of both

- providing agistment and other services
- costs and benefits of horse breeding options
- syndication of stallions
- market and/or partners
- methods for selecting breeding stock, including:
  - individual horse records
  - pedigree records
  - progeny records
- indicators of genetic progress within a breeding program, including:
  - consistent goals/objectives
  - heritability
  - selection intensity
  - generation individual
- financial and economic assessment of breeding program
- identifying appropriate professional support, including veterinarian and farrier, and securing service agreements
- key requirements of regulations and codes of practice relevant to developing and implementing a breeding strategy, including:
  - animal welfare
  - biosecurity
  - rules of racing or other discipline requirements.

## Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
  - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
  - technology to prepare a horse breeding strategy
- specifications:
  - information about costs of resources required for breeding program
  - enterprise information about horse pedigrees and population data.

Training and assessment strategies must show evidence of the use of guidance provided in the Companion Volume: User Guide: Safety in Equine Training.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

## Links

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